

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Jean-Jacques Codani et al.

Application No: 10/723,522

Filed: November 26, 2003

For: SYSTEMS AND METHODS FOR
SEQUENCE COMPARISON

Art Unit: 1631

Confirmation No.: 8678

Examiner: Clow, Lori A

Certificate of Electronic Filing

I hereby certify that this paper is being filed using the EFS-Web electronic filing system on November 13, 2009.

/ Stephen B. Deutsch /

Stephen B. Deutsch

RESPONSE TO SECTION 1.105 REQUIREMENT FOR INFORMATION

In response to the Requirement for Information under Section 1.105 dated May 21, 2009, Applicants submit the following Response with accompanying materials.

Request for “copies of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter.”

In response to this requirement, in the interests of expediting prosecution and ensuring that the Examiner has full and complete information, Applicants are providing information, some of which does not necessarily fit the legal definition of “publication,” and information that is not limited to “the disclosed subject matter” if it appears that it may provide useful background information to the technical material in the application. In particular, while items #1 and #2 below are publications, items #3 to #5 were company white papers and sales material, and item #6 was a press release.

1. Dufresne, et al., “Patent Searches for Genetic Sequences: How to Retrieve Relevant Records from Patented Sequence Databases”, *Nature Biotechnology*, Volume 20, pages 1269-1271 (2002).

2. Dufresne, et al., "Approximate String-Matching Algorithm for DNA Patenting Evaluation in the Pharmaceutical Industry", in Darvas, et al., "Chemical Genomics", pages 315-342 (2004).
3. "LASSAP – High Performance Scientific Software for Large Scale Sequence Comparison", *LASSAP White Paper*, GENE-IT (2001).
4. Heus, "Biofacet – High Performance Scientific Software for Genome-Scale Sequence Comparison", *Biofacet White Paper*, GENE-IT (2001).
5. "Should You Rely on Public Databases for Sequence Information?", Derwent. (1999)
6. "GENE-IT Announces Biofacet, Revolutionary New Tool to Speed Up Similarity Searching and Clustering of Sequences", GENE-IT (October, 2001).

Request for "a copy of GENE-IT's Biofacet User Manual (2002) as referenced in Dufresne, ...reference 11."

The reference in the Dufresne article does not correspond precisely to the title of any manual. Applicants therefore provide three manuals. The first two date from 2002, the date of the manual cited in Dufresne. The third dates from 2003, but is a "Biofacet" manual as referenced in the Dufresne article. "Biofacet" was the new name of the product formerly referred to as "LASSAP," but although the name was used in 2002, the manuals were not renamed until 2003.

7. "LASSAP User Manual", March 7, 2002, GENE-IT.
8. "LASSAP User Manual", June 17, 2002, GENE-IT.
9. "Biofacet v2.4 User Manual, 2003, GENE-IT.

Request for "any publication in which the KERR algorithm (as described in the above reference document) is described."

There are numerous documents which mention the KERR algorithm; as may be determined from an online search on the term. However, it is believed that the following three references are the most relevant and useful.

10. Baeza-Yates, R. & Navarro, G., "Faster approximate string matching." *Algorithmica* vol. 23, pages 127–158 (1999).

11. Navarro, G., "A guided tour to approximate string matching", *ACM Computing Surveys*, vol. 33, pages 31–88 (2001).
12. Landau, G.M. et al., "An efficient string matching algorithm with k differences for nucleotide and amino acid sequences", *Nucleic Acids Research*, vol. 14, pages 31–46 (1986).

CONCLUSION

In view of the foregoing response and the accompanying information, Applicants consider the Response herein to be fully responsive to the referenced Section 1.105 requirement for information, and respectfully submits that all of the pending claims are now in condition for allowance. Early and favorable reconsideration is therefore respectfully solicited.

If there are any remaining issues or the Examiner believes that a telephone conversation with Applicants' attorney would be helpful in expediting the prosecution of this application, the Examiner is invited to call the undersigned at 617-832-1118.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those which may otherwise be provided for in documents accompanying this paper; however, in the event that additional extensions of time are necessary, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a). Should an extension of time be required, Applicants request that the extension fee and any other fee required for timely consideration of this application be charged to Deposit Account **No. 06-1448, Reference GIO-101**.

The Commissioner is hereby authorized to credit any overpayment or charge any required fees or deficiencies to Deposit Account Number **06-1448, Reference GIO-101**.

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